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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FOGG AND ASSOCIATES, LLC			ELALLAM, AHMED	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/027,927	Applicant(s) WANG ET AL.	
	Examiner AHMED ELALLAM	Art Unit 2668	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-4, 10,11-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 1, the specification does not adequately describe the claimed "establishing a permanent virtual circuit between the switch and the remote node based on the embedded information". More specifically, the specification doesn't describe how the PVC is established. For example the it is recited in the specification that:

At block 204, the process embeds information on a permanent virtual connection between switch 108 and remote node 106 into a packet, e.g., an ATM cell for transmission over network 102. In one embodiment, the information that is embedded in the data packet is embedded in the destination address and includes slot, port, VPI and VCI information for the permanent virtual connection. At block 206, the process transmits the packet with embedded information over a switched virtual circuit through network 102. In one embodiment, this packet is sent over a static connection under the IISP protocol. At block 208, the process sets up the permanent virtual circuit between switch 108 and remote node 106 based on the embedded information. The method ends at block 210.

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From the above statement, it is not clear how the process “sets up the permanent virtual circuit between switch 108 and remote node 106 based on the embedded information”.

Claims 2-4 depends from claim 1, thus they are subject to the same rejections.

Regarding claim 10, the specification does not adequately describe the claimed “establishing a permanent virtual circuit between the switch and the remote node based on the at least slot, port, VPI and VCI information to complete the end-to-end connection”. The specification doesn't describe how the PVC is established based on the embedded information for similar reasons as indicated above with reference to claim 1.

Claim 11 suffers from the same deficiencies as in claim 1, thus it is subject to the same rejections.

Claims 12-14 depends from claim 11, thus they are subject to the same rejections.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art in view of Bosloy et al; US006714544B1. Hereinafter referred to as APA and Bosloy respectively.

Regarding claim 1, the APA disclose a method for establishing an end-to-end virtual circuit in a data network comprising:

Established soft permanent virtual circuit between customer premises equipment (CP) over a network with an ISP (claimed remote node) that is connected to another switch (claimed switch) in the network, wherein the established connection comprises:

A permanent virtual connection between the CP equipment and a DSALM over a telephone line, see [05];

A static connection between DSLAM and the switch connected to the ISP, see paragraph [06];

A permanent virtual connection between the switch and the ISP, see paragraph [05];

(Examiner interpreted the established connection of prior art of being preceded by corresponding establishing steps, because that is required for the connection setup).

The prior art doesn't specify embedding information for the permanent virtual connection between the switch and the ISP in a packet transmitted over the static connection in a network for the establishment of a permanent virtual circuit between the switch and the ISP.

However, Bosloy discloses a command having embedded information for establishing a permanent virtual connection. See column 5, lines 40-55. (The

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command having the information is interpreted as being the claimed packet having embedded information because the command is an ATM packet).

It would have been obvious to a person of ordinary person in the art to send a command for establishing the permanent virtual circuit as taught by Bosloy in the system of APA for establishing the APA connection between the switch and the ISP from the source endpoint (CP) to the destination endpoint (ISP) so that end-to-to-end permanent virtual connection of APA can be realized between the switch and the ISP using command signaling content. The motivation would be the recognition of using available methods in establishing end-to-end virtual connections in the system of prior art.

Regarding claim 2, Bosloy discloses that the embedded information comprises VCI/VCI information, see column 5, lines 45-48). (Claimed embedding information comprises embedding information in the destination address, Examiner interpreted the VPI, VCI to be in the destination address of ATM command packet, as dictated by the established ATM standard).

Regarding claims 3 and 4, Bosloy discloses that the embedded information comprises slot, port, virtual path identifier (VPI) and virtual channel identifier (VPI) for a permanent virtual circuit. See column 5, lines 40-48.

Regarding claims 5 and 10, the APA discloses conventional DSLAM located at a central office of a telephone company, the DSLAM includes: a number of different cards, at least one line card that provides connection to the data network over one or more high capacity lines, a number of channel cards that provide connection to a

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number of modems over a number of telephone lines, see paragraph [04]. APA further discloses having established soft permanent virtual circuit between customer premises (CP) over the network with an ISP (claimed remote node) that is connected to another switch (claimed switch) in the network, wherein the established connection comprises:

A permanent virtual connection between the CP equipment and a DSALM over a telephone line, see [05];

A static connection between DSLAM and the switch connected to the ISP, see paragraph [06]; (claimed static connection in the data network between at least one line card and the switch);

A permanent virtual connection between the switch and the ISP, see paragraph [05];

(Examiner interpreted that corresponding establishing steps precede the established connection of prior art, because that is required for the connection to be established).

The prior art doesn't specify information "for" the permanent virtual connection between the switch and the ISP is embedded in a packet transmitted over the static connection between a line card and the switch, as in claim 5 and establishing the permanent virtual circuit between the switch and the ISP based on at least slot, port, VPI and VCI information to complete the end-to-end connection as in claim 10.

However, Bosloy discloses a command having embedded information for establishing permanent virtual connection. See column 5, lines 40-55. (The command having the embedded information is interpreted as being the claimed packet having embedded information because the command is an ATM packet). It would have been

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obvious to a person of ordinary person in the art to reverse the sending of command signaling for establishing the permanent virtual circuit of that taught by Bosloy in the system of APA for establishing the APA connection between the switch and the ISP so that end-to-to-end permanent virtual connection of APA can be realized between the switch and the ISP using command signaling content. The motivation would be the recognition of using available methods in establishing end-to-end virtual connections in the APA system.

Regarding claim 6, APA discloses a channel card that support ADSL, see paragraphs [02] and [04].

Regarding claim 7, Examiner interpreted the command having the embedded information of being the claimed packet having embedded information in the destination address of the packet, because the command is an ATM packet, and information usually (VPI/, VCI, port etc...) is inserted in the destination address portion of the ATM packet by standard (ATM Forum).

Regarding claims 8 and 9, Bosloy discloses that the embedded information comprises slot, port, virtual path identifier (VPI) and virtual channel identifier (VPI) for a permanent virtual circuit. See column 5, lines 40-48. (The command having the embedded information is interpreted as being the claimed packet having embedded information because the command is an ATM packet, the VPI/, VCI, port etc... are inserted in the destination address portion of the ATM packet by standard).

Regarding claims 11-14, claims 11-14 have limitations of rejected claims 6 and 8, thus they are subject to similar rejections.



***Response to Arguments***

3. Applicant's arguments filed 01/27/2006 have been fully considered but they are not persuasive:

Examiner objections to the disclosure and claim 5, have been withdrawn in view of the Amendment.

**Rejections under 35 USC § 112:**

Applicants gave a case law to overcome Examiner rejections under 112 1<sup>st</sup> paragraph, but fail to give an example of how the embodiment of the invention works.. That is Applicants fail to explain and give evidence on how the permanent virtual circuit between the switch and the remote node is established based on the embedded information. Applicants' conclusion that a person of skill in the art would know how to set up the permanent virtual circuit using the embedded information, e.g., slot, port, VPI and VCI, is a mere conclusion and is not considered an factual evidence.

Applicants asserted that the Examiner's argument fails to meet the initial burden of explaining why the Examiner doubts the accuracy of claims 1-4. In response to Applicants, a reasonable explanation would be the missing steps in selecting a specific slot, port, VPI and VCI for a given subscriber, and on what basis the slot and port and VPI are determined? and how the permanent virtual circuit is established between the switch and the remote node, how the remote node is selected among other nodes (ISPs of figure 1)?

Applicant may submit factual affidavits under 37 CFR 1.132 or cite references to show what one skilled in the art knew at the time of filing the application. A declaration or affidavit is, itself, evidence that must be considered. The weight to give a declaration or affidavit will depend upon the amount of factual evidence the declaration or affidavit contains to support the conclusion of enablement. In re Buchner, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991) ("expert's opinion on the ultimate legal conclusion must be supported by something more than a conclusory statement"); cf. In re Alton, 76 F.3d 1168, 1174, 37 USPQ2d 1578, 1583 (Fed. Cir. 1996) (declarations relating to the written description requirement should have been considered).Emphasis added.

***Rejections under 35 USC § 103:***

Applicants' statement with regard to the specification paragraph [06] is noted. Applicants also indicated that *"any connection taught in APA relates to using a static routing protocol between a multiplexer [the DSLAM] and a switch and not for "a permanent connection between a switch and a remote node"*. Emphasis added.

In response, Examiner notes that the statement that the APA relates to using a static routing protocol between a multiplexer and a switch and not for "a permanent connection between a switch and a remote node is true. However, Examiner asserts that since the static connection of APA is being established, Bosloy is used to complement for the missing permanent connection between the switch and a remote node of the prior art, because the command of Bosloy has embedded information for establishing a permanent virtual connection, the command being an ATM packet,

which is similar to the “embedded information” in the packet of the invention. See column 5, lines 40-55. Moreover Bosloy discloses that the embedded information comprises slot, port, virtual path identifier (VPI) and virtual channel identifier (VPI) for a permanent virtual circuit, which is exactly similar to Applicant’s embedded information in the ATM packet. See column 5, lines 40-48.

The argument that Bosloy uses the PNNI signaling and teaches away from APA that uses IISIP protocol is irrelevant given the similarities of Bosloy’s embedded information to that of Applicants. Thus in response to Applicants’ argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which Applicants relies (IISIP and not PNNI protocol) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As to claims 5 and 10, Applicants have similar remarks as in claim 1, thus the argument is not persuasive for similar reasons indicated above with regard to claim 1.

Examiner believes, given the most reasonable broadest interpretation of the claimed limitations, the rejection above is proper.

### ***Conclusion***

4. Applicant’s amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
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3/19/06



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